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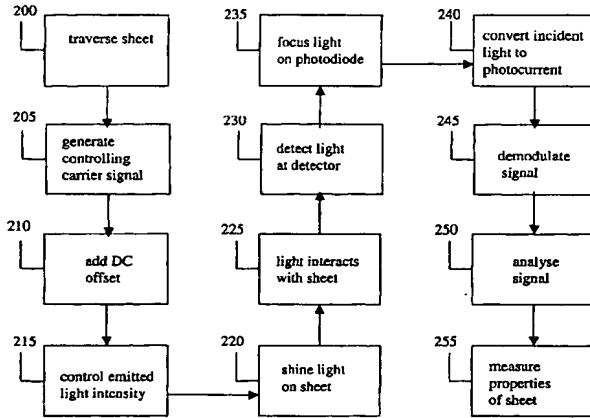
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(54) Title: SYNCHRONOUS OPTICAL MEASUREMENT AND INSPECTION METHOD AND MEANS

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(57) Abstract: The invention relates to a method finding holes, and other related defects and measuring characteristics of sheets of industrial material. Optical detection systems are constantly plagued by intense ambient light and challenged in accuracy. The invention exhibits a defect detection method and means that is resistant to intense ambient light and is capable of inspecting sheets of metareial (410, 510, 610, 710) continuously, without integration of long periods. In the invention, synchronous detection between the optical transmitters and receivers is utilised. The invention is applicable for inspecting and measuring metarials like paper, metal rubber, plastic, aluminium foil, copper foil, film, coated metal sheet or any other sheet -like material that could run on a production line. The invention is also applicable for finding special defects like holes, pinholes, scratches, spots, cracks, edge faults, streaks, surface faults or any other conceivable defects.